

## Powerful. Tough. Future-Proof.

Our NY industrial Box PC has been designed from first principles to be powerful, reliable and scalable, making it ideally suited to visualization, data handling, measuring and controlling. The latest insights in design simplification eliminates faults caused by complexity which, with other unique design features, maximizes uptime and reduces costs. The future will be IT driven: Omron's Industrial PC platform will make you part of it.



NYB1E, NYB17,  
NYB25, NYB1C



NYB35,  
NYB2C



NYB35,  
NYB2C,  
NYB2A

## Features

- No internal cables to cut faults, maximizes uptime
- Unique simplified thermal design to reduce downtime
- Powerful Intel® Core™ technology for optimized performance
- Three Ethernet ports to increase connectivity
- USB3.0 for fast data-transmission
- Optional NY Monitor Link interface for connectivity up to 100 m
- Free choice of drive technology: HDD, SSD, CFAST and built-in SD card slot

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The product photographs and figures that are used in this document may vary somewhat from the actual products.

# System Configuration



\* NY Monitor Link option: Connect monitor up to 100 m via standard Ethernet cable.

# Model Number Structure

The purpose of this model number legend is to provide understanding of the meaning of specifications from the model number. Models are not available for all combinations of code numbers.



## Ordering Information

### NY-series Industrial PC Platform

#### Recommended models

The industrial Box PC has extended configuration possibilities to meet your requirements, below an overview of the most used and recommended models. Selecting one of the models below will bring the benefit of faster delivery times.

In case your preferred model is not listed below, please contact your Omron representative to discuss the possibilities.

Product name	Specifications						Model
	Operating system	CPU type	RAM memory	Storage size	Interface option	PCIe-slot	
Industrial Box PC	Windows 10 IoT Enterprise 2016 LTSC - 64 bit	Intel® Xeon® E3-1515M v5	8GB (non-ECC type)	128 GB SSD type (MLC)	RS-232C	Yes	NYB1E-313K1
			8GB (ECC type)			Yes	NYB1E-C13K1
		Intel® Core™ i7-4700EQ	8 GB (non-ECC type)	128 GB SSD type (MLC)	RS-232C	Yes	NYB17-313K1
				320 GB HDD type	RS-232C	Yes	NYB17-313C1
				64 GB SSD type (SLC)	RS-232C	Yes	NYB17-31391
		Intel® Core™ i5-7300U	8 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB35-30370
				128 GB SSD type (MLC)	RS-232C	Yes	NYB35-313K1
		Intel® Celeron™ 3965U	4 GB (non-ECC type)	256 GB CFast type (MLC)	No	No	NYB2C-20370
				128 GB SSD type (MLC)	RS-232C	Yes	NYB2C-213K1
		Windows 10 IoT Enterprise 2019 LTSC - 64bit	Intel® Atom® x5-E3940 Processor	4 GB (non-ECC type)	128 GB CFast type (MLC)	No	No
8 GB (non-ECC type)	256 GB CFast type (MLC)			No	No	NYB2A-30470	

## Accessories

### Optional Hardware

Product name	Specifications	Model
Mounting Brackets *1	Book mount	NY000-AB00 NY000-AB02 NY000-AB04
	Wall mount	NY000-AB01
SD Memory Cards	Card type: SD Card Capacity: 2 GB Format: FAT16	HMC-SD291
	Card type: SDHC Card Capacity: 4 GB Format: FAT32	HMC-SD491
USB Flash Drives	Capacity: 2 GB	FZ-MEM2G
	Capacity: 8 GB	FZ-MEM8G
Storage Devices *2	Storage type: HDD, Capacity: 320 GB	NY000-AH00
	Storage type: HDD, Capacity: 500 GB	NY000-AH01
	Storage type: HDD, Capacity: 1 TB	NY000-AH02
	Storage type: SSD SLC, Capacity: 32 GB	NY000-AS00
	Storage type: SSD SLC (Apacer), Capacity: 64 GB	NY000-AS01
	Storage type: SSD SLC (Hagiwara), Capacity: 64 GB	NY000-AS03
	Storage type: SSD MLC (Innodisk), Capacity: 128 GB	NY000-AS04
	Storage type: SSD MLC, Capacity: 500 GB	NY000-AS05
	Storage type: CFast MLC, Capacity: 64 GB	NY000-AT00
	Storage type: CFast MLC, Capacity: 128 GB	NY000-AT01
USB Type-A to USB Type-B Cables	Cable length: 2 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 2M
	Cable length: 5 m USB 2.0 Minimum bend radius: 25 mm	FH-VUAB 5M
DVI Cables	Cable length: 2 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 2M
	Cable length: 5 m Supports DVI-D Minimum bend radius: 36 mm	NY000-AC00 5M
Industrial Monitor	<ul style="list-style-type: none"> <li>LCD touchscreen</li> <li>Multi-touch functionality</li> <li>Supply voltage: 24 VDC</li> <li>Up to 1,280 x 800 pixels at 60 Hz</li> <li>2 USB Type-A Connectors</li> <li>Programmable brightness control</li> <li>Standard and 100 m cable models are available.</li> </ul>	NYM1□W-C10□□
Power Supply	<ul style="list-style-type: none"> <li>Output voltage: 24 VDC</li> <li>Push-In Plus terminal blocks</li> </ul>	S8VK-S□□□24
UPS *3	Output voltage during backup operation: 24 VDC ± 5%	S8BA
UPS Communication Cable	Cable length: 2 m Signals for <ul style="list-style-type: none"> <li>Signal output (BL, TR, BU, WB)</li> <li>Remote ON/OFF input</li> <li>UPS Stop Signal input (BS)</li> </ul>	S8BW-C02

**Note:** Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

\*1. Select the required type:

NY000-AB00: for NYB1E, NYB17, NYB25, NYB1C, NY51□□

NY000-AB02: for NYB35-□1, NYB2C-□1

NY000-AB04: for NYB35-□0, NYB2C-□0

\*2. CFast Storage can be used only with the NYB35-□0, NYB2C-□0. Please contact your Omron representative to discuss the possibilities.

\*3. Revision number 04 or higher.

The revision number of the UPS can be retrieved from the serial number label on the product and the product packaging.

A3□ □□□□□□□□ □□ □  
 1            2            3    4

Item	Description
1	Product code
2	Product period and sequential number
3	Revision number
4	RoHS status

## Spare Parts

The following spare parts for the Industrial Box PC are available.

Product name	Specifications	Model
Battery	One battery is supplied with the Industrial Box PC. The battery supplies power to the real-time clock. The battery is located inside the Industrial Box PC. Service life: 5 years at 25°C	CJ1W-BAT01*
Fan Unit	The Fan Unit is available for the Industrial Box PC that has active cooling. Service life: 70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity. Shelf life: 6 months This is the storage limitation with no power supplied.	NY000-AF00
Accessory Kit	Accessory Kit containing all accessories supplied with the Industrial Box PC. <ul style="list-style-type: none"> <li>• Power connector</li> <li>• I/O connector</li> <li>• Drive bracket for drive installation</li> <li>• 4 mounting screws for drive installation</li> <li>• PCIe Card support for PCIe Card installation</li> <li>• PCIe Card clip for PCIe Card installation</li> </ul>	NY000-AK00

\*Only for models with replaceable battery.

## Installed Support Software

Item	Specifications
Industrial PC Support Utility	The Industrial PC Support Utility is a software utility to assist in diagnosing and resolving problems of the Industrial Box PC. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC Tray Utility	The Industrial PC Tray Utility is a software utility that provides information about the current state of the Industrial PC, its related devices, and associated software. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC System API	The Industrial PC System API allows programmers to create programs that can retrieve information or set an indicator status of the Industrial Box PC. The API makes use of the included IPC System Service to manage the hardware. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Utility	For the optional OMRON Industrial Monitor. The Industrial Monitor Utility provides a user interface to control settings and display details of connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor Brightness Utility	For the optional OMRON Industrial Monitor. The Industrial Monitor Brightness Utility is a small software utility that allows you to control the brightness of the screen backlight of all connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial Monitor API	For the optional OMRON Industrial Monitor. The Industrial Monitor API allows programmers to create applications that can control the hardware features and retrieve information from connected Industrial Monitors. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.
Industrial PC Rescue Disk Creator	The Industrial PC Rescue Disk Creator creates a USB Rescue Disk which can be used to back-up and restore the Omron IPC Operating System. It is pre-installed on the Industrial Box PC and the Industrial Panel PC.

## Soft-NA

Product name	Specifications	Number of licenses	Media	Model
Soft-NA	The Soft-NA is software that displays information on FA manufacturing sites while providing safety, reliability, and maintainability as an industrial display on which operations can be performed as necessary. The Soft-NA runs on the following OS: Windows 10 Pro Version 1903 or later 64 bit	– (Media only)	DVD	NA-RTSM
		1 license	USB dongle	NA-RTL01
		3 licenses		NA-RTL03
		10 licenses		NA-RTL10

### System Requirements

Item	Requirement	
OS	Windows 10 Pro Version 1903 or later 64 bit	
Processor	Intel Atom® x5-E3940 equivalent or higher processor	
RAM	4 GB or more	
Free space in the hard drive necessary for installation	1 GB or more	
Optical disk drive	DVD-ROM drive	
Communication port	USB	USB2.0 Type-A x 2 *1
	LAN	Ethernet x 2 *1

\*1. Since one port is for project transfer, it is not required unless the corresponding path is used.

**Note:** Refer to NA-series catalog (Cat. No. V413) for the system configuration of Soft-NA.

# General Specifications

## Performance Specifications

Item			NYB1E- □□□□□	NYB17- □□□□□	NYB25- □□□□□ *4	NYB1C- □□□□□ *4	NYB35- □1□□□	NYB2C- □1□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□	
Main system	CPU	CPU type	Intel® Xeon® E3-1515M v5	Intel® Core™ i7-4700EQ	Intel® Core™ i5-4300U	Intel® Celeron® Processor 2980U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Atom® Processor x5-E3940	
		Cores / Threads	4 / 8	4 / 8	2 / 4	2 / 2	2 / 4	2 / 2	2 / 4	2 / 2	4 / 4	
		CPU base frequency	2.8 GHz	2.4 GHz	1.9 GHz	1.6 GHz	2.6 GHz	2.2 GHz	2.6 GHz	2.2 GHz	1.6 GHz	
		Maximum turbo frequency	3.7 GHz	3.4 GHz	2.9 GHz	–	3.5 GHz	–	3.5 GHz	–	1.8 GHz	
		Cache	8 MB	6 MB	3 MB	2 MB	3 MB	2 MB	3 MB	2 MB	2 MB	
		Cooling details	Requires active cooling (fan)			Passive cooling (fanless)						
	Memory	Memory size *1	8, 16 or 32 GB	4, 8 or 16 GB	2, 4 or 8 GB	2, 4 or 8 GB	4 or 8 GB	4 or 8 GB	8 or 16 GB	4 or 8 GB	2, 4 or 8 GB	
		Memory type	DDR4 (ECC is available)	DDR3L (non ECC)			DDR4 (non ECC)		DDR4 (non ECC)		DDR3L (non ECC)	
	Trusted platform module (TPM)		Available									
	Graphics controller		Intel® Iris™ Pro Graphics. Up to two independent screens.		Intel® HD Graphics. Up to two independent screens.							
Intel® Iris™ Pro Graphics P580			Intel® HD Graphics 4600	Intel® HD Graphics 4400	Intel® HD Graphics	Intel® HD Graphics 620	Intel® HD Graphics 610	Intel® HD Graphics 620	Intel® HD Graphics 610	Intel® HD Graphics 500		
Watchdog		Yes										
Operating system	Windows OS		Windows 10 IoT Enterprise 2016 LTSC - 64 bit	Windows Embedded Standard 7 - 32 bit Windows Embedded Standard 7 - 64 bit Windows 10 IoT Enterprise 2016 LTSC - 64 bit			Windows 10 IoT Enterprise 2016 LTSC - 64 bit		Windows 10 IoT Enterprise 2016 LTSC - 64 bit		Windows 10 IoT Enterprise 2019 LTSC - 64 bit	
Storage devices	Drives *1	Hard Disk Drive		• 320 GB, 500 GB, 1 TB Serial ATA 3.0		• 320 GB Serial ATA 3.0		• 320 GB Serial ATA 3.0		N/A		
		Solid State Drive	SLC type	• 64 GB Serial ATA 3.1		• 32 GB and 64 GB Serial ATA 3.1		• 64 GB Serial ATA 3.1		N/A		
			MLC type	• 128 GB, 500 GB Serial ATA 3.1		• 128 GB Serial ATA 3.1				• 64 GB, 128 GB, 256 GB Serial ATA 3.1		
	Drive bays (HDD/SSD) *2		2	2	2	1	2	2	CFast slot	CFast slot	CFast slot	
Connectors	Power connector		24 VDC									
	I/O connector		2 inputs (UPS signal and power OFF control) and 1 output (Industrial Box PC power state)									
	USB2.0 Type-A	Number of ports	2									
		Maximum current	500 mA									
		Maximum cable length	5 m									
	USB3.0 Type-A	Number of ports	2									
		Maximum current	900 mA									
		Maximum cable length	3 m									
	Ethernet connectors	Number of ports	3									
		Physical layer	10BASE-T, 100BASE-TX or 1000BASE-T									
DVI-I connector	Video interface	Digital or analog			Digital only							
	Resolution	Up to 1,920 x 1,200 pixels at 60 Hz										
	Maximum DVI cable length	Dependent upon connected monitor type and resolution										
Optional connector (select one per system)	RS-232C		Standard DSUB9 connector (Non-Isolated)						N/A			
	DVI-D	Video interface	Digital only								N/A	
		Resolution	Up to 1,920 x 1,200 pixels at 60 Hz								N/A	
		Maximum DVI cable length	Dependent upon connected monitor type and resolution								N/A	
	NY Monitor Link	Video interface	Digital only									
		Resolution	1,280 x 800 pixels at 60 Hz									
		Connector type	RJ45									
		Cable shielding, type and max. length	S/FTP, Cat.6A, 100 m									
GigE LAN	Physical layer	10BASE-T, 100BASE-TX or 1000BASE-T			–							

Item		NYB1E- □□□□□	NYB17- □□□□□	NYB25- □□□□□ *4	NYB1C- □□□□□ *4	NYB35- □1□□□	NYB2C- □1□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□	
PCIe Card Slot	Configuration	X4 (4 lanes) up to Gen 3		X1 (1 lane) up to Gen 2		X2 (2 lanes) up to Gen 3		N/A			
	Card height	Standard height cards, 4.20 inches (106.7 mm) *3								N/A	
	Card length	Half length cards, 6.6 inches (167.65 mm)								N/A	
Battery	Model	CJ1W-BAT01				Non replaceable battery					
	Service life	5 years at 25°C				10 years at 40°C					
Fan unit	Model	NY000-AF00		No fan unit							
	Service life	70,000 hours of continuous operation at 40°C with 15% to 65% relative humidity		-							
LED	PWR, ERR, HDD, RUN										

\*1. Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

\*2. Depending on the model one or two drives are supported.

\*3. Low profile cards, 2.536 inches (64.4 mm) are not supported.

\*4. Not recommended for new projects.

## Electrical Specifications

Item	NYB1E- □□□□□	NYB17- □□□□□	NYB25- □□□□□	NYB1C- □□□□□	NYB35- □1□□□	NYB2C- □1□□□	NYB35- □0□□□	NYB2C- □0□□□	NYB2A- □0□□□	
CPU type	Intel® Xeon® E3-1515M v5	Intel® Core™ i7-4700EQ CPU	Intel® Core™ i7-4700EQ CPU	Intel® Celeron® 2980U CPU	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Core™ i5-7300U	Intel® Celeron® Processor 3965U	Intel® Atom® Processor x5-E3940	
Rated power supply voltage	24 VDC, non-isolated									
Allowable power supply voltage range	20.4 to 28.8 VDC									
Grounding method	Ground to less than 100 Ω									
Inrush current	At 24 VDC: 12 A / 6 ms max. for cold start at room temperature									
Overvoltage category	Meets IEC 61010-2-201: Category II									
EMC immunity level	IEC 61131-2: Zone B									
RTC accuracy	At ambient temperature of 55°C: -3.5 to +0.5 min error per month At ambient temperature of 25°C: -1.5 to +1.5 min error per month At ambient temperature of 0°C: -3 to +1 min error per month									
Power button life	100,000 operations									
Battery life	5 years at 25°C (for battery CJ1W-BAT01)				10 years at 40°C					
Fan life	8 years of continuous operation at 40°C		-	-	-	-	-	-	-	
Power consumption *	-									
Maximum power consumption including drives and expansions	121 W	114 W	75 W	66 W	69 W	50 W	61 W	42 W	41 W	
Maximum power consumption excluding drives and expansions	86 W	81 W	52 W	45 W	46 W	27 W	46 W	27 W	26 W	
Drives	-									
HDD 320 GB	2 W								-	
HDD 500 GB	2 W								-	
HDD 1 TB	2 W								-	
SSD SLC 32 GB	2 W								-	
SSD SLC 64 GB	2 W								-	
SSD MLC 128 GB	2 W								-	
SSD MLC 500 GB	3 W								-	
CFast MLC 64 GB					-		1 W			
CFast MLC 128 GB					-		1 W			
CFast MLC 256 GB					-		1 W			
Expansions	-									
USB	14 W max. ((2 x 500 mA at 5 V) + (2 x 900 mA at 5 V))									
PCIe	15 W max.	15 W max.	5 W max.	5 W max.	5 W max.	5 W max.			-	

Note: Refer to the *Industrial Box PC User's Manual (W553)* for detail.

\* The total power consumption is the sum of the power consumption of all items that are installed in your Industrial Box PC.

To guarantee S8BA UPS operation in combination with our IPC, the specified combination of UPS and power-supply must be used.

Item		NYB1E / NYB17	NYB25 / NYB1C / NYB35 / NYB2C / NYB2A
Minimum power requirements	Power supply	240 W	120 W
	UPS	240 W	120 W

## Components and functions

The intent behind our IPC platform is to empower engineers to become unstoppable in developing machines and factories that are better, faster and safer by giving them the freedom and flexibility to explore the opportunities provided by modern IT. In line with Omron's traditional quality standards, the Industrial Box PC is designed to meet the demands of industrial users for maximum robustness and reliability. All maintenance sensitive products (HDD/SDD, fan, battery, and PCIe Card) can be easily reached from the outside of the system. No need to open the electronics compartment, less risk on failure.

### Optional connection

RS-232C, DVI-D, NY Monitor Link or GigE LAN.  
 NY Monitor Link allows high speed video and data communication over 100 m via standard Ethernet cable.

### DVI-D video

Digital, up to 1,920 x 1,200 pixels at 60 Hz  
 (Intel® Core™ i7: DVI-I (Digital or analog))

### 3x High speed Ethernet

10BASE-T, 100BASE-TX or 1000BASE-T

### 2x USB2.0

500 mA maximum current  
 Maximum cable length: 5 m

### 2x USB3.0

900 mA maximum current  
 Maximum cable length: 3 m

### Indication LEDs

### Robust Mechanics

Full metal housing with black industrial coating

### Industrial Design

Winner of the 2016 Red Dot design award\* for excellent industrial design



### 1x PCIe slot

Half Length Cards 6.6 inches  
 Standard Height Cards 4.2 inches  
 Easy PCIe mounting drawer

Intel® Xeon®, Intel® Core™ i7: X4 (4 lanes)  
 Other CPUs: X1 (1 lane)

### 1x SD Memory Card slot

SDHC type (SD 2.0 specification)  
 Up to 32 GB capacity

### 1x CFast Card slot

### Storage

2.5 inch Solid State Drive (SSD) or Hard Disk Drive (HDD), 7 mm height

### I/O (UPS connection)

Input:  
 Power sequence signal  
 Output:  
 SPST-NO contact configuration  
 24 VDC at 2 A switching capacity (resistive load)

### Power switch

### 24 VDC Power

24 VDC non isolated  
 Lockable power connector

**Note:** Not all combinations are possible or standard available. Please contact your Omron representative to discuss the possibilities.

\* The Red Dot design award has been presented by the Design Zentrum Nordrhein Westfalen since 1955. It is one of the best-respected design competitions in the world, along with the iF award (Germany) and IDEA (the United States).



## Environmental Specifications

Item	Specifications	
Operation environment	Ambient operating temperature *1	0 to 55°C
	Ambient storage temperature *1	-20 to 70°C
	Ambient operating humidity *1	10% to 90% with no condensation
	Ambient storage humidity *1	10% to 90% with no condensation
	Operating atmosphere	No corrosive gases
	Altitude	2,000 m max.
	Noise resistance (during operation)	Conforms to IEC61000-4-4, 2kV (power lines)
	Vibration resistance (during operation)	Conforms to IEC 60068-2-6. For a product with an SSD: 5 to 8.4 Hz with 3.5 mm single amplitude and 8.4 to 150 Hz with 9.8 m/s <sup>2</sup> for 10 times each in X, Y and Z directions. For a product with a HDD the vibration resistance depends on the mounting orientation *2.
	Shock resistance (during operation)	Conforms to IEC 60068-2-27. 147 m/s <sup>2</sup> , 3 times in each X, Y and Z directions
	Installation method	Book mount, Wall mount
Pollution degree	2 or less: Meets IEC 61010-2-201.	
Applicable standards *3	EU Directives: EMC Directive 2014/30/EU (EN 61131-2) and RoHS Directive KC Registration, RCM, cULus, EAC	

\*1. The allowed ambient operating temperature and ambient humidity depend on product type, CPU type, mounting orientation, and storage device type.  
\*2. Vibration resistance depends on the Industrial Box PC's mounting orientation and storage device type:

Mounting orientation	SSD or CFast Card	HDD
Book	9.8 m/s <sup>2</sup>	2.5 m/s <sup>2</sup>
Wall		4.9 m/s <sup>2</sup>

\*3. Refer to the OMRON website ([www.ia.omron.com](http://www.ia.omron.com)) or contact your OMRON representative for the most recent applicable standards for each model.

## Storage Device Specifications

Item	Specifications											
Model	NY000-AS00	NY000-AS01	NY000-AS03	NY000-AS04	NY000-AS05	NY000-AH00	NY000-AH01	NY000-AH02	NY000-AT00	NY000-AT01	NY000-AT02	
Capacity	32 GB	64 GB	64 GB	128 GB	500 GB	320 GB	500 GB	1 TB	64 GB	128 GB	256 GB	
Type	SSD (SLC)		SSD (SLC)	SSD (MLC)	SSD (MLC)	HDD	HDD	HDD	CFast (MLC)	CFast (MLC)	CFast (MLC)	
S.M.A.R.T. support	Yes											
Rotation speed	-	-	-	-	-	5,400 r/min		-	-	-	-	
Interface	Serial ATA 3.1					Serial ATA 3.0			Serial ATA 3.1			
Sustained standard read speed	Up to 160 MB/s	Up to 160 MB/s	Up to 500 MB/s	Up to 530 MB/s	Up to 415 MB/s	-	-	-	Up to 530 MB/s	Up to 530 MB/s	Up to 530 MB/s	
Sustained standard write speed	Up to 145 MB/s	Up to 150 MB/s	Up to 370 MB/s	Up to 190 MB/s	Up to 200 MB/s	-	-	-	Up to 100 MB/s	Up to 190 MB/s	Up to 210 MB/s	
Operating temperature	0 to 70°C					5 to 55°C	5 to 55°C	0 to 60°C	-40 to 85°C			
Operating humidity	10% to 95% (with no condensation)		10% to 85% (with no condensation)	10% to 95% (with no condensation)		8% to 90% (with no condensation)			10% to 95% (with no condensation)			
Storage temperature	-40 to 100°C		-45 to 90°C	-55 to 95°C	-55 to 95°C	-40 to 65°C			-55 to 95°C			
Storage humidity	10% to 95% (with no condensation)					8% to 90% (with no condensation)			5% to 95% (with no condensation)	10% to 95% (with no condensation)		
Life	1,500 TB written	3,000 TB written	1900 TB written	208 TB written	154 TB written	Approximately 5 years or 20,000 powered-ON hours (whichever comes first) under the following conditions: • 25°C at 101.3 kPa • Less than 333 powered-ON hours/month *1 • Less than 20% operation while powered-ON *2 • Less than 1.30 x 10 <sup>6</sup> seeks/month		Average Annualized Failure Rate (AFR): 0.50% Under the following conditions: • Case Temperature 40°C • Power on Hours (POH) ≤ 3120		125 TB written	208 TB written	417 TB written

Note: Orders for NY000-AS02 are no longer accepted, as of November 30, 2018.

\*1. Powered-ON hours include sleep and standby modes.

\*2. Operation includes seeking, writing, and reading functions.

## Dimensions

NYB1E-□□□□□  
 NYB17-□□□□□  
 NYB25-□□□□□  
 NYB1C-□□□□□



NYB35-□□□□□  
 NYB2C-□□□□□



Item	Specifications		
	Box		
	XYB1E-□□□□□ NYB17-□□□□□ NYB25-□□□□□ NYB1C-□□□□□	NYB35-□1□□□ NYB2C-□1□□□	NYB35-□0□□□ NYB2C-□0□□□ NYB2A-□0□□□
Dimensions	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 88.75 mm	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 73 mm	Width X = 282 mm Depth Y = 195 mm. Y = 200 mm including the DVI connectors. Height Z = 41 mm
Weight	3.8 kg	3.0 kg	2.1 kg

## Bracket Specifications

The metal mounting brackets mount your Industrial Box PC and they are the connection for the functional ground. Use metal screws with a diameter of 4 mm or 5 mm to mount the brackets. Mounting screw locations for book mount and wall mount orientation:



(Unit: mm)

Model	Bracket type	Drill Specifications			Product Dimensions	
		Hole Distance X	Hole Distance Y	Hole Distance A	Bracket Width	Bracket Height
NYB1E NYB25 NYB17 NYB1C	Book mount	60 mm	303 mm	11 mm	96 mm	319 mm
	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm
NYB35-□1□□□ NYB2C-□1□□□	Book mount	50 mm	303 mm	11 mm	80 mm	319 mm
	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm
NYB35-□0□□□ NYB2C-□0□□□ NYB2A-□0□□□	Book mount	n.a.	298 mm	11 mm	47 mm	319 mm
	Wall mount	245 mm	218 mm	12 mm	23 mm	245 mm

## Recommended Related Products

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**Industrial Monitor  
NY-series**

The Industrial Monitor is of key importance at the interface between operator and system. The Industrial Monitor is efficient, effective and highly visible with an attractive design.



**Industrial Panel PC  
NY-series**

The Industrial Panel PC intelligently combines the functionality of the Industrial Box PC and Industrial Monitor. No cables are used between the two components, which ensures optimal signal distribution and reliable operation in industrial environments.



**UPS  
S8BA-series**

The OMRON S8BA UPS protects the Industrial Box PC from power failures, voltage variations and instantaneous voltage drops.

## Related Manuals

The following manuals are related. Use these manuals for reference.

Manual name	Cat. No.	Model numbers	Application	Description
Industrial Box PC User's Manual	W553	NYB1E-□1□□□ NYB17-□1□□□ NYB25-□1□□□ NYB1C-□1□□□ NYB35-□□□□□ NYB2C-□□□□□	Learning all basic information about the Industrial Box PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Box PC.	An introduction to the Industrial Box PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>
NY-Series Industrial Box-PC without OS User's Manual	W586	NYB1E-□1□□□ NYB17-□10□□ NYB25-□10□□ NYB1C-□10□□ NYB35-□□0□□ NYB2C-□□0□□	Learning about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Box PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>
Industrial Monitor User's Manual	W554	NYM19W-C1□□□ NYM15W-C10□□ NYM12W-C10□□	Learning all basic information about the Industrial Monitor. This includes introductory information with features, hardware overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Monitor.	An introduction to the Industrial Monitor is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>
Industrial Panel PC User's Manual	W555	NYP17-□1□□□-15WC100□ NYP17-□1□□□-12WC100□ NYP25-□1□□□-15WC100□ NYP25-□1□□□-12WC100□ NYP1C-□1□□□-15WC100□ NYP1C-□1□□□-12WC100□ NYP35-□□□□□-15WC100□ NYP35-□□□□□-12WC100□ NYP2C-□□□□□-15WC100□ NYP2C-□□□□□-12WC100□ NYP35-□0□□□-19WC1□0□ NYP2C-□0□□□-19WC1□0□	Learning all basic information about the Industrial Panel PC. This includes introductory information with features, hardware overview, software overview, specifications, mounting, wiring, connecting, operating and maintaining the Industrial Panel PC.	An introduction to the Industrial Panel PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>
NY-Series Industrial Panel-PC without OS User's Manual	W587	NYP17-□10□□-15WC100□ NYP17-□10□□-12WC100□ NYP25-□10□□-15WC100□ NYP25-□10□□-12WC100□ NYP1C-□10□□-15WC100□ NYP1C-□10□□-12WC100□ NYP35-□□0□□-15WC100□ NYP35-□□0□□-12WC100□ NYP2C-□□0□□-15WC100□ NYP2C-□□0□□-12WC100□ NYP35-□0□□□-19WC1□0□ NYP2C-□0□□□-19WC1□0□	Learning about the Omron Industrial PC functionality without an installed Operating System	An introduction to the Industrial Panel PC is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Hardware</li> <li>• Software</li> <li>• Specifications</li> <li>• Installation</li> <li>• Operating Procedures</li> <li>• Maintenance</li> </ul>
UPS S8BA User's Manual	U702	S8BA	Learning the information that is necessary to use the Uninterruptible Power Supply (UPS) Unit.	An introduction to the UPS is provided along with the following information: <ul style="list-style-type: none"> <li>• Overview</li> <li>• Preparation</li> <li>• Installation and Connection</li> <li>• Check and Start Operation</li> <li>• Maintenance and Inspection</li> <li>• Shutdown Processing</li> <li>• I/O Signal Functions</li> <li>• Troubleshooting</li> </ul>